Instructions for Replacing a PRT Temperature Sensor:
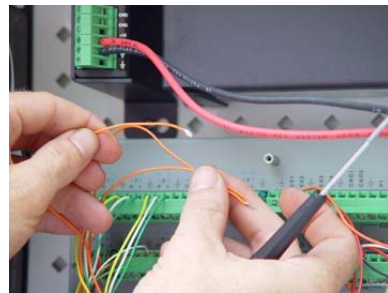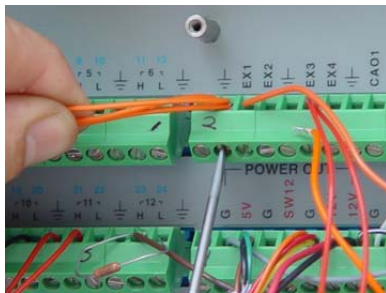
Note: If you have any questions, please
Contact Mark Hall at (865) 607-1737,
Brent French at (865) 607-1359, or
Michael Black at (865) 607-1621.

Tools needed: Data logger screwdriver
Wire clipper
Cable ties
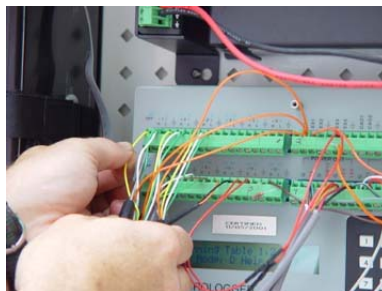Key
Duct seal
Shipping label for return

(**NOTE: ATDD personnel will provide instructions as to which aspirated shield/PRT assembly (#1, #2, or #3) is to be replaced, and the instructions to follow will depend on which PRT is being replaced. For instruction 9, ATDD personnel will provide the coefficients to be entered.)**

1.   Please start this process shortly after the top of an hour to minimize data loss. Open the door of the datalogger box.

2.   To remove loosen wiring to the excitation voltage as shown and remove the orange wire for the PRT to be replaced from the bundle. (From left to right at the upper left terminal strip, PRT#_____)

PRT 1- yellow wire (SE1), white wire (SE2), green (grd), orange wire (EX1)
PRT 2- yellow wire (SE3), white wire (SE4), green (grd), orange wire (EX1)
PRT 3- yellow wire (SE5), white wire (SE6), green (grd), orange wire (EX1)

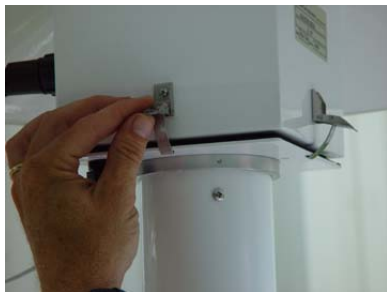3.   Disconnect the wiring for PRT#_____ as shown.

4.   Pull the cable assembly through the bottom of the data logger box.
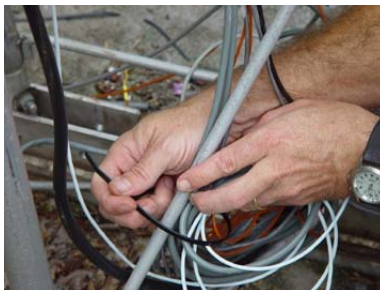

5.   Clip the wire ties from the appropriate bundles to remove the PRT assembly.
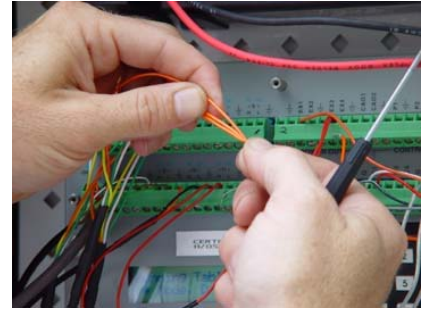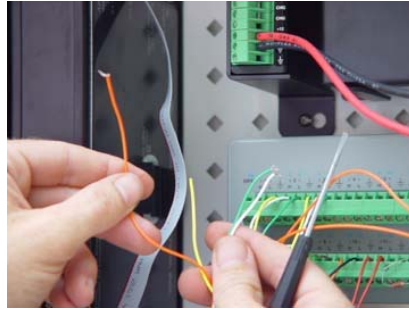

6.   Remove the intake with the old PRT assembly and replace it with the new one. The PRT's are numbered 1, 2, 3 and are located in the East (most distant from data logger box), South (middle) and West (nearest) Aspirated Shields. The one to be replaced is in PRT#_____, located in the _____ Shield.

7.   Route the cable assembly to the data logger box and re-bundle wiring
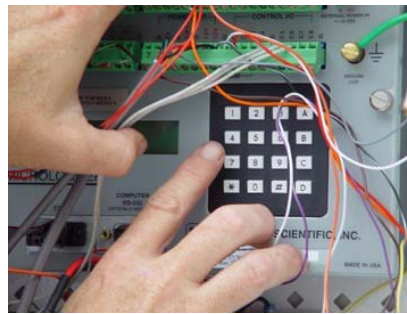
8.   Route through the hole in the bottom and wire to the corresponding terminals.   Remember to include all three orange wires to EX1.

9.   The new coefficients are added to the program using the keypad as follows: (the coefficients to be used will be provided by ATDD personnel, and are in the format shown below where the numbers provided will fill the blanks shown)

Press * 1 ____ A A A A A C __ __ __ D __ __ A __ __ __ D __ __ A __ __ D __ __ __ A

Then * 0 to initialize the new program.

10.   The temperature value can be checked by pressing * 6 ___ A (the value to be entered in the space between the 6 and A will be provided bt ATDD personnel). The temperature values for the three PRTs are located at 4, 5, 6 (use "A" to advance and "B" to back-up to view different locations). The value for the replaced PRT can be compared to the other two PRTs, and should agree within 0.3 degree. When finished press * 0, to re-initialize the program.

11.   Ship the old intake and tools to ATDD with the FedEx return label that was included.